New statewide applications have been integrated within the Energy Learning Exchange website to provide more resources for teachers and students. The site features a tab for Classroom Resources for Illinois teachers to utilize and share information about energy and energy careers in their classrooms. All of the Illinois Pathways STEM Learning Exchanges are now connecting to a full library of resources through the Illinois Shared Learning Environment (ISLE) and the Open Educational Resources (OER). Teachers can download a variety of items to use in developing their lesson plans, categories include Bright Ideas, Careers in Energy, ELE Partners, ELE Powered Curriculum, Professional Development, and Videos. Within each category, teachers can further filter their selections to narrow down their choices. Teachers can also submit their own lesson plans and ideas to the database, in order to share their materials with other teachers across the state. This growing resource library can be accessed from the Energy Learning Exchange website at www.energy.illinoisstate.edu/careers/materials.shtml.

An Events Calendar is linked on the Energy Learning Exchange homepage to highlight upcoming energy careers and education related events across the state for students and teachers. The calendar format has been updated, and is now part of the ISLE Illinois Pathways calendar of events. The calendar direct link is www.Energy.IllinoisState.edu/About/Calendar.html. If your company or organization has events coming up that focus specifically on energy careers and education, please email complete details for inclusion on the calendar to Janet at jniezgoda@ilstu.edu.

Illinois Pathways is also linked within the ELE site, highlighting careers that focus on development, planning, and managing the production of energy and its distribution through smart grid technologies. The direct link to view the details on energy careers is www.ilpathways.com/Pages/Energy.aspx.

Students Challenged to Brainstorm New Energy Solutions

The Energy Learning Exchange joined the Research & Development Learning Exchange to challenge high school students to brainstorm solutions for a modern energy problem. Students are to design a prototype or plan for an energy efficient system, or improvements to an existing system, that can provide reliable power to a community to meet basic energy needs during or after a weather-related power outage.

Students from Glenbrook South High School, Urbana High School, Washington Community High School, and Williamsfield High School are participating in the challenge. The program is structured as an after-school extracurricular activity, one to two hours per week, in the spring semester.

“We want students to tackle a project with real world relevance, and I’m excited to see what creative solutions the students will come up with for this project,” said Dr. David Loomis, Director of the Energy Learning Exchange “We will provide them with reliable and credible resources only when they hit roadblocks.”

Jeritt Williams, STEM Education Coordinator, explained that the challenge was presented to students in person at the four schools in January and February. Information provided included the challenge basics and initial groundwork to get the projects started. Students will present their new energy solutions in May.
Outreach Exhibits Share Energy Learning Exchange Information

Jeritt Williams, STEM Education Coordinator, exhibited on behalf of the Energy Learning Exchange at several events across the state over the last few months, providing classroom resources for teachers and career information for students.

At the 60 by 25 Conference, Jeritt exhibited and met with community and school leaders. The event was hosted by Advance Illinois, held in Aurora on January 14th, and included a tour of the John C. Dunham STEM Partnership School.

Jeritt met with several teachers from northeastern Illinois at Kankakee Community College where teachers participated in “The Science of Energy” activities for two days, January 22nd-23rd. The workshop was hosted by the National Energy Education Development (NEED) project and sponsored by ComEd.

The Illinois Association for Career and Technical Education Conference was held on February 12th in Peoria. The ELE exhibit at that event featured curriculum and resources for teachers regarding Energy Literacy and the Energy Industry.

An ELE exhibit on energy careers was also featured at Rich East High School’s Energy Expo on February 17th in Park Forest, and at Elmwood Park Memorial High School’s Career Fair on February 20th.

Dr. David Loomis and Jeritt Williams presented for Thomas Metcalf School’s Career Day in Normal, IL, on February 25th. At the event, middle school students explored energy careers and experimented with gear and tools used by technicians.

Outreach exhibits provide classroom resources for teachers and career information for students.

Dr. David Loomis shares a presentation on energy with students at Thomas Metcalf School.

Energy Learning Exchange Participating Members:

- Advance Renewables Sustainability Consulting
- AGL Resources
- Alliance Pipeline
- Ameren Illinois
- Argonne National Laboratory
- Association of Illinois Electric Cooperatives
- Bloomington Area Career Center
- Career Preparation Network, Education for Employment Region 060
- Caterpillar, Inc.
- Chicago Public Schools
- College of DuPage
- College of Lake County
- ComEd
- Constellation New Energy
- Cook County Workforce Investment Board
- Danville Area Community College
- DuPage Workforce Board
- East St. Louis District #189
- Eastern Illinois University
- Economic Development Council of the B-N Area
- EDP Renewables
- EMB Consultants, Inc.
- Exelon Corporation
- Exelon Generation
- Geronimo Energy
- Homewood-Flossmoor Com. H.S. Dist. 233
- IBEW-NECA Technical Institute
- Iberdrola Renewables
- Illinois Business Roundtable
- Illinois Chamber of Commerce
- Illinois Commerce Commission
- Illinois Community College Board
- Illinois Dept. of Commerce & Economic Opportunity
- Illinois Dept. of Employment Security
- Illinois Energy & Recycling Office, IL DCEO
- Illinois Energy Association
- Illinois Green Economy Network
- Illinois Institute for Rural Affairs, WIU
- Illinois Institute of Technology
- Illinois Municipal Electric Agency
- Illinois Solar Energy Association
- Illinois State Board of Education
- Initiative for Sustainability and Energy, NU
- Integrys Energy Group
- Inverenergy
- Joliet Junior College
- Kankakee Community College
- Lake County Workforce Investment Board
- Lewis & Clark Community College
- Maestros Ventures, LLC
- Mainstream Renewable Power
- McHenry Co. Workforce Investment Board
- MidAmerican Energy
- Midwest Generation EME, LLC
- Midwest ISO
- Mt. Carmel Public Utility Company
- National Corn to Ethanol Research Center, SIU
- North Shore Gas
- Northern Illinois University
- Northern Kane Co. Reg. System/EFE 110
- Northwestern University, ISEN
- NPL
- Office of the Governor
- Pembridge School District #259
- Peoples Gas
- Peoria JATC Local 34
- PJM Interconnection
- Pontiac Township High School
- Prairie State Generating Company
- Primera Engineers
- PROactive Strategies, Inc.
- Richland Community College
- River Valley Workforce Investment Board
- Robert M. Fletcher Company
- S&C Electric Company
- SEIU Local 73
- Southern Illinois University Carbondale
- Sustainable Strategies
- Suzlon
- Teamsters Local 786
- Three Rivers Education for Employment System
- Tran/Ingersoll Rand
- University of Illinois
- University of Illinois at Chicago
- Urbana School District #116
- Utility Workers Union of America, Local 18007
- WES Engineering
- Western Illinois University
- Williamsfield CUSD 210
- Workforce Boards of Metropolitan Chicago
- Workforce Investment Board of Will County